SATURDAY, APRIL 26, 1873.

ORIGINAL LECTURES.

LECTURES

ON THE SURGERY OF THE NARES, LARYNX, AND TRACHEA.

BEING THE MÜTTER LECTURES FOR 1872.

Delivered before the College of Physicians of Philadelphia,

BY J. SOLIS COHEN, M.D.

Reported by R. M. BERTOLET, M.D.

(Continued from page 452.)

LECTURE IX.

INFLAMMATORY AFFECTIONS OF THE NASAL PASSAGES.

NASAL ABSCESS.

ABSCESS of the nasal passages is met with in the inflammation resulting from traumatic injury, in that of common chronic coryza, and in that of syphilis, and occasionally in idiopathic inflammation, the result of sudden exposure to change of temperature, or that condition of system which gives rise to the formation of boils. Such abscesses are developed in the sub-mucous connective tissue, usually not far from the exterior orifice, and may occupy the septum or ala. They may be small, like a little boil, or large enough to occlude the affected nostril and press the septum aside. Sometimes the exterior of the nose is swollen, and also more or less of the face, even, in some instances, to the production of œdema. The phenomena of fever are present in severe cases.

Left to itself, the abscess ruptures spontaneously in a few days; but the duration of the affection can be lessened by opening the abscess with the knife. If the inflammation is severe, a leech may be applied within the nostril. Warm-water applications are very beneficial, impregnated with sedatives or astringents.

Syphilitic abscess is usually a tertiary manifestation originating by a gummous deposit. Its progress is slower than that of acute abscess; it is less painful, and attended by a less viscid discharge. After rupture of the abscess, the discharge is thicker, purulent, sanious, and offensive. Perforation of the septum is not an infrequent result. The local treatment is the same as for ordinary abscess, in the first instance; but the resulting ulcer may require the local application of nitrate of mercury and the like. The patient should be brought under the systemic influence of iodide of potassium.

Guersant speaks of having frequently encountered nasal abscess in infants supposed to be affected with polypi. He attributes the affection usually to blows and falls, but has seen it dependent on caries and necrosis of the vomer, etc.

Chronic inflammation, especially when syphilitic or scrofulous, frequently terminates in ulcerative destruction of more or less of the cartilaginous septum; occasionally by one large orifice, sometimes by several small perforations. The edges of the perforations require frequent cleansing, and occasional touching with caustics. Operations for closure of large perforations have been performed by plastic transplantation of mucous membrane.

CORYZA.

Coryza is an acute catarrhal inflammation of the nasal mucous membrane, sometimes confined to one nostril, but more frequently affecting both, and often extending into the maxillary sinus, frontal sinus, lachrymal duct, and Eustachian tube. The mucous membrane is red and swollen, and discharges a more or less copious secretion, which varies in quality at different stages of the affection; being at first serous, then sero-purulent, and loaded with salines, which sometimes excoriate the tissues. Sometimes fibrin is secreted, and collects in a membranous layer.

The symptoms of this affection are too well known to need enumeration; when severe, pain will be felt in all the localities implicated in the inflammation, and there will be headache, insomnia, loss of appetite, and general languor. Nasal respiration will be more or less obstructed, until a copious discharge takes place which relieves the distended tissues. The affection subsides spontaneously in a few days, rarely progressing to suppuration. Sometimes a series of attacks follow in a more or less rapid succession.

A peculiar syphilitic coryza is noticed in children, due usually to the development of mucous patches, often progressing to ulceration, with more or less destruction of cartilage and bone.

Coryza can often be broken up by inducing copious diaphoresis within the first twelve or twenty-four hours of the attack. The snuffing up of vapors of iodine, camphor, chloride of ammonium, or other substances, sometimes accelerates the stages of the affection and brings it to a prompt conclusion in a few hours. When fully established, the suffering can be lessened by warm foot-baths, warm aromatic drinks, and the use of anodynes to promote sleep.

An idiosyncratic inflammation of the nasal passages and parts adjacent occurs in certain individuals from the inhalation of various vegetable and animal emanations that periodically appear in the atmosphere. The distress is very severe, and the usual symptoms are those of ordinary coryza. Change of locality at the usual time of the attack is often the only remedy, care being taken to seek a residence where the special conditions productive of the affection are not present. In some instances quinia or carbolic acid, injected into the nostrils, seems to destroy the organisms which produce the disease.

CHRONIC CORYZA.

Chronic inflammation of the nasal passages may be catarrhal, scrofulous, or syphilitic. It usually produces a more or less hypertrophied, and sometimes an indurated, condition of the mucous mem-

brane of the turbinated bones and of the alæ of the nostrils. Sometimes the hypertrophied membrane protrudes into the passage, so as to be mistaken for fibroid formations. Small polypi and warty excrescences are not infrequently developed in addition.

The inflammation of simple catarrhal chronic coryza rarely leads to ulceration; but that of scrofula and syphilis is quite prone to ulcerate. In addition to this, specific inflammation not infrequently destroys more or less of the cartilaginous and bony structures, giving rise to an offensive discharge, which is characterized by the term ozæna.

The products of secretion are not discharged freely, portions of them remaining pent up in the sinuosities of the passages, where they undergo decomposition. They are discharged in crusts or lumps at irregular intervals.

The symptoms of the affection are: more or less obstruction to nasal inspiration, and the presence of morbid discharges from the nostrils and from the posterior nares.

The treatment of the affection consists principally in the prompt removal of the accumulated products of secretion, and the maintenance of the general vigor, by proper diet, exercise, and cleanliness of habit. The parts should be syringed or washed out by the nasal douche several times a day, water in liberal quantities being used for the purpose, impregnated with salt, bicarbonate of soda, chlorate of potassium, and the like, to assist in the detachment of adherent inspissated mucus and pus. The water used should be warm. After the parts are cleansed, astringent solutions, such as alum or sulphate of zinc, should be used in a similar manner, so as to impress the cleansed mucous membrane; and strongly impregnated with detergents, permanganate of potassa, carbolic acid, chlorinated soda, etc., if there is any offensive odor about the parts. The protrusions of mucous membrane should be cauterized or torn off, and dead bone be removed by surgical operation. Scrofulous patients should be placed upon the use of cod-liver oil and the phosphates, and syphilitic subjects upon iodide of potassium; and tonics and stimulants should be given where the general system is depressed. Protracted and persistent treatment of this kind is requisite for success.

EPISTAXIS.

Bleeding from the nose may be traumatic or idiopathic, or may depend upon disease. It is restrained by the local application of cold and astringents, by compressing the nostrils, by arresting bleeding, in extreme cases, by ligature; in short, by all the methods employed for restraining hemorrhage elsewhere. Where ordinary means do not suffice, a tampon is introduced into the posterior nares from the mouth, by means of Bellocq's canula, or some substitute for it, and secured by threads to a plug in the nostril. These tampons should not be retained in position more than forty-eight hours at a time, and if the epistaxis recurs in the removal, fresh ones should be applied.

The patient should be kept at rest, and all movements which favor the continuance or reproduction of hemorrhage are to be interdicted. At the same time systemic remedies are to be administered to favor the contraction of the arterioles; such, for example, as ergot, iron, turpentine, etc.

OCCLUSION OF THE NOSTRILS.

The nostrils may be occluded congenitally, or may become so as the result of accident or disease. The occlusion may consist simply in adhesion of the integument, or in the presence of an intervening membrane of cutaneous and mucous tissue, or even of fibroid tissue. Fracture of the nasal bones may be productive of occlusion.

In the treatment of this condition the offending tissues should be divided or removed, and the passages thus made kept pervious by the insertion of tubes or tampons until healing has been completed; any subsequent contraction being overcome by systematic dilatation.

OCCLUSION OF THE POSTERIOR NARES.

This is usually congenital. The obstruction may consist of fibrous tissue merely, or of bone also. The use of the probe will establish the diagnosis.

A passage through the parts is made by boring through them with a sharp steel instrument, or by the galvanic cautery, and is then maintained patulous by the frequent introduction and occasional retention of metallic dilators.

INFILTRATION OF THE SIDES OF THE VOMER.

The mucous membrane of the vomer is apt to become infiltrated, or pushed off by a sub-mucous infiltration, in inflammatory affections of the nasal passages. The lecturer was the first to draw attention to this condition, which is recognized upon rhinoscopic examination by the appearance of whitish and puffy tumors, more or less symmetrical, on either side of the vomer. The symptoms of the affection are those of obstruction to nasal respiration, and an uncomfortable sensation in the parts.

The treatment consists in destroying them by caustic applications or pulling them away by means of suitably curved forceps.

DEVIATION OF THE SEPTUM.

These are sometimes congenital, sometimes produced by disease, or the presence of tumors. In some instances it becomes advisable to attempt the restoration to the middle line. This is accomplished by the insertion of metallic tubes, compressed sponge, or laminaria tents, which are kept in daily for several hours at a time.

A so-called periosteal resection is sometimes performed for the relief of the deformity. A flap of mucous membrane is raised from the cartilage; the cartilage is thinned down until it can be pressed into the middle line; the flap is replaced, and the parts kept in position by sponges in the nostrils.

The unpleasant sensations of the patient are some-

times relieved by cutting out a piece of the septum, and thus establishing a passage for respiration on both sides.

Sometimes the cartilaginous septum is separated from the bone by subcutaneous division, after tamponing the nostrils, and the whole nose pulled over to the opposite side and retained by adhesive strips. Sometimes the nose is divided in the middle line, and the cartilage resected.

FOREIGN BODIES IN THE NASAL PASSAGES.

Foreign bodies are frequently inserted into the nasal fossæ by children; and if they are discovered early, they are very readily removed. But they may become impacted, and in time give rise to an irritating and offensive discharge. If the foreign body be of a comparatively large size, or be of such a character as to become swollen at the point of impaction, the nose will be distended out of its normal shape, and there will be increased severity of the pain and other local symptoms.

The presence of a foreign body in the nostrils usually produces inflammatory reaction, which is very apt to take on the appearances of a chronic coryza, with copious secretion of pus; terminating in ulceration, if not actual necrosis, of the parts against which the foreign body lodges.

When foreign bodies are retained for a long time within the nasal cavities, they are apt to become incrusted with the saline portions of the altered secretions to which these irritants give rise, and thus are formed the rhinoliths or nasal calculi sometimes met with in this region.

Sometimes the foreign body finds its way into the frontal sinus, especially when it is an insect or ascaris, producing intense frontal pain, headache, and even delirium, which may terminate fatally.

The earliest possible removal of the foreign body from the nostrils is the treatment that should be adopted in every case. Sometimes it can be dislodged by exciting the act of sneezing by the use of sternutatories. The injection of a strong stream of water through the nostril from behind forwards by means of the posterior nasal syringe, or by Thudichum's douche passed from the opposite nostril, will often suffice to expel the foreign body; and these simple and harmless measures should be tried in every case before resorting to more violent extractive efforts with the forceps and other instruments. Curved bougies and catheters are frequently serviceable, when passed forwards from the pharynx, in pushing the obstacle towards the exterior. External incisions, and even division of the nose, may become necessary for the removal of an impacted foreign body, when the usual means of extraction have proved unsuccessful.

Tumors, or foreign bodies, or parasites, in the frontal sinuses may require trepanning of the frontal bone; or access may be gained to these cavities by division of the nose at its root, and turning it over upon the face.

RHINOLITHS.

Calculi are occasionally met with in the nasal fossæ; their origin being generally due to the retention of some small foreign body which serves as a nucleus for the deposit of calcareous matter in successive layers. These rhinoliths are generally movable, varying in size from that of a pea to that of a hazel-nut, and in some instances completely obstructing the nostril. They are attended with the ordinary symptoms of obstruction, irritation, nasal and frontal pain, and a muco-purulent discharge.

The treatment consists in the removal of the concretions, an operation usually easily performed by the ordinary forceps. When the calculus is very large, crushing may have to be first performed.

ORIGINAL COMMUNICATIONS.

A NEW INSTRUMENT FOR TREATING DISEASES OF THE NECK AND CAVITY OF THE WOMB.

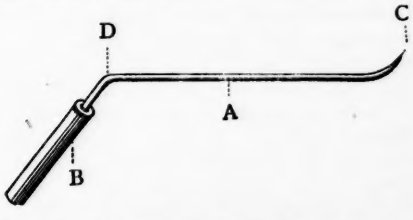
BY H. E. WOODBURY, M.D.,
Washington, D.C.

THE object of this paper is to introduce to the profession an instrument, simple in construction, and one that has proved valuable in my own practice. I desire that others may test it, believing that the physician as well as the patient will appreciate its value. It was designed and constructed to supply a desideratum in uterine therapeutics, patent to every physician who has encountered in practice those persistent and most troublesome diseases, endocervicitis and endometritis.

Having used the pencils of lunar caustic and of potash, as directed by our best authorities and practised by our most skilful physicians, I am free to confess that I was dissatisfied with the results of this mode of treatment, and felt that some means should be devised to promote a more rapid cure in such cases.

Weighing the matter well in my own mind, I concluded that the cause of the prolonged treatment under the old method was to be found in the fact that the medicinal agents employed were not brought thoroughly in contact with the diseased surfaces. In order to make the applications to the parts affected more thorough, I constructed the instrument I am about to describe, which I term the *Uterine Injector*. Whether by its use this end is accomplished I leave it for the profession to decide.

The instrument is simple, and easily made. Any physician can manufacture it for himself, as I have done for two years past. It consists of a piece



of glass tube (A), calibre of catheter No. 8 or 10, bent by heating in the flame of a spirit-lamp, as

shown in the diagram, drawn out to a point, and having a capillary opening (C) in the end. The edges of this opening are perfectly rounded by melting slightly in the flame. If too much heat be applied, the aperture will be closed. This tube is six or seven inches in length. Attached to the other end is a piece of rubber tubing (B), the extremity of which is closed so as to be air-tight. The curve near the point of the instrument should correspond to the curvature of the neck and cavity, and the angular bend at D is to prevent the hand from obstructing the view when the instrument is used.

By compressing the rubber (B) we exhaust the air in the tube,—on the principle of the syringe,—and, introducing the pointed end into a bottle of acid, iodine, or any other fluid, then releasing the rubber from pressure, we can take into the tube whatever quantity of the liquid we desire to use. The instrument is introduced into the neck or cavity of the womb, through the speculum, and its contents discharged slowly by compressing the rubber tube (B).

I believe that this simple contrivance will commend itself to the profession from the following considerations:

1. Its adaptation to the purposes for which it is designed.

2. The thorough manner in which, by its aid, applications may be made to all parts of the neck and cavity of the organ.

3. The convenience of the instrument, which prevents the hand of the operator from coming in contact with the acids or fluids used.

4. The precision with which the amount of fluid to be used can be regulated,—in the majority of cases only a few drops being required.

5. From the nature of the materials used in its construction, it is not likely to be acted upon by the strong acids, nor will it easily get out of repair.

I have been using the uterine injector in my practice for more than two years, and during that period have succeeded in curing my cases in less than one-half the time required by the old nitrate of silver treatment,—a method I had fully tested previous to the construction of my instrument.

The following are the remedies upon which I most rely: nitric acid; carbolic acid; tincture of iodine; extract of hemlock; tannic acid and glycerine.

Modus operandi.—Introducing the speculum,—I prefer Stover's, for I can use it as a retractor if the vaginal walls be lax,—I first explore the neck and cavity with the uterine sound, to satisfy myself as to the extent of the ulceration. After this I thoroughly remove the secretions from the parts. I then pass the injector—charged with a few drops of the fluid I desire to use—into the neck or cavity of the organ, as the case may require, and *very slowly* inject the fluid, *gradually removing the instrument during the act*, in order to make the application cover all of the affected surface. Finally I pass through the speculum a plug of cotton,—the size of which varies according to the laxity of the vaginal walls,—to which a fine strong cord is attached. This plug is saturated with carbolic acid and olive oil or glycerine,—one part of the former to five or six of the latter,—and is left in contact with the os uteri for from twelve to twenty hours, when the patient by means of the cord removes it herself, and injects a weak solution of sulphate of zinc, or Castile soap and water.

During the first fortnight of treatment I make an application every other day,—afterwards at longer intervals, as the necessities of the case may require. I always order uterine and general tonics in these cases, and I am convinced that they generally prove valuable auxiliaries to the local treatment advocated in this paper, and fortify the system against subsequent attacks of these annoying and debilitating diseases.

I know that there is a great diversity of opinion in the profession as to the expediency of intra-uterine injections, and feel constrained to refer to the views, relative to this subject, of one to whom we are under many obligations for valuable contributions to our science in the past.

Dr. Gaillard Thomas, in the *New York Medical Journal*, August, 1870, says of them, "They have done, and are going to do, a great deal of harm." What evidence does he adduce in proof of this? He states that he injected five drops into the uterine cavity, and it caused a tedious peritonitis, the patient barely escaping with her life.

He adds, "But it will be said the cervix was not dilated in this case," and goes on to state that dilatation is itself attended with danger, citing a case in which he practised it, using Peaslee's dilators, and his patient died of peritonitis in one week. "I think," he says, "the mischief was done by the dilatation of the neck of the uterus. Yet I am very sure that the dilators were passed with requisite skill, for I spend much of my time in this practice, and this operation is one to which I have constant resort."

Now, what does this all prove? Simply that the doctor had an unfortunate case,—a case in which he believed that dilatation of the cervix lighted up a peritoneal inflammation, without any injection whatever; and yet he says that he constantly resorts to this operation, attended with danger as he knows it to be; while he "will not use intra-uterine injections, even for the hemorrhage of abortion."

Again, in the case where his patient barely escaped with her life, there was, without doubt, a diseased condition of the Fallopian tubes,—dilatation, perhaps, which might have given rise to the untoward results of the operation. We have read or heard of a case in which a uterine sound passed into and through an unimpregnated uterus to a distance of four or five inches. The instrument was repeatedly passed, in the presence of several reliable physicians. Where did it go? Where could it go, but into a dilated Fallopian tube? Such cases, of course, are exceptional, and to our mind they offer no argument against intra-uterine injections.

A man died from erysipelas, developed by vaccination, a few years ago, in my own neighborhood. Is this an argument against vaccination? A woman dies in confinement when the forceps have been used to complete the delivery. Should we therefore dispense with this valuable obstetrical instru-

ment? Tracheotomy, lithotomy, and many other operations are sometimes followed by death. Are we therefore to fold our hands and refuse to use the knife? If so, there will be an end to all progress in the healing art; and the noblest of the professions will verily become a by-word and a reproach among men.

If the use of such an instrument be objected to on the ground that danger attends the injection of the cavity of the womb, I think such an objection may be set aside by the recorded experience of such men as Dr. Barnes of London, the late Dr. Simpson of Edinburgh, and Dr. Peaslee of New York.

At a meeting of the Medical Society of the County of New York, a few years since, the latter gentleman, referring to the injection of a solution of persulphate of iron in metrorrhagia, said, "Having employed the agent in perhaps one hundred cases, I have never seen any harm result, except that in one case it gave great pain." Dr. P.'s experience fully confirms the statements of Drs. Barnes and Simpson as to the safety of the operation, even where a comparatively large quantity of fluid is injected. The instrument I use will contain but from fifteen to twenty minims; I inject from three to ten drops.

After the manner indicated in this paper, I have treated every case of endo-cervicitis or ulceration that has occurred in my practice for more than two years, and in no single case have any unpleasant results followed. I believe that when the acid or iodine is injected in a small quantity *and slowly* it is speedily and entirely taken up by the diseased tissues with which it comes in contact, and acts far more efficiently and rapidly than the pencil of caustic, which by coagulating the albuminous compounds on the surface forms a sort of white film, beneath which its effect is not apt to extend. A remark that is true in regard to many other instruments, now properly appreciated by the profession, applies with equal force to this: judgment and discretion should be exercised in using it. In reckless or inexperienced hands, no instrument is more dangerous than the lancet, the scalpel, or the catheter; and yet what intelligent physician would therefore ignore their use?

Trusting that by this contribution to uterine therapeutics I may in some degree be instrumental in advancing uterine surgery and in relieving thereby the ills of the weaker sex, I present my uterine injector to the profession, with the hope that in their hands it may prove as valuable an aid as it has so far proved in my own.

WASHINGTON, D.C., Jan. 1, 1873.

NOTE.—Without taking the trouble to go over my note-book, I have written down from memory more than twenty names of patients treated by me after the method set forth in this paper, in all of which the treatment proved safe and successful.

NOTHING is so successful as success. If a physician is supposed to have a large practice, everybody will contribute to make it larger; just as a man who is reputed rich can always borrow.

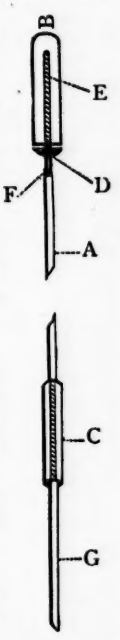
MEERSCHAUM PROBE.

BY H. CULBERTSON,

Late Assistant-Surgeon, U. S. Army.

IN 1864 I invented this probe, and lately have made an addition to it for the detection of clothing in wounds. The following is the description:

The shaft A is in length from D to C 4½ inches, and in diameter that of a medium-sized probe. At D is a shoulder ⅛ inch in diameter, which is securely attached to the shaft. E is the continuation of the shaft A, is ⅜ inch in length, $\frac{1}{16}$ inch in diameter, and a thread is cut on its surface the entire length. B is a round tip of meerschaum, 3 lines in diameter and 6 lines in length, which is saturated with a cold solution of the ferridcyanide of potassium,—red prussiate of potassa,—and which is drilled out in its centre longitudinally ⅜ of an inch, the opening being $\frac{1}{16}$ of an inch, strong, in diameter.



The surface of the shaft from F to D, as well as the exposed surface of the shoulder D, is roughened on the shaft longitudinally for the length of ¼ inch and on the curved surface of the shoulder D. A to C is represented a cylinder, in which is cut a thread, and which receives the ends of the shafts A G. The shaft G is 4½ inches in length. The entire probe (except the tip) is made of silver, and is about 9½ inches in length.

The tip is attached to the shaft E thus. Wrap it with paper, over this bind it firmly with thread, fill its cavity with finely-pulverized gum shellac, packing this with a pin; heat the shaft to a dull red, and immediately insert it into the cavity (filled with the gum) of the tip, push it quickly down, and hold it firmly against the shoulder D until the gum has cooled. The tip can then be dressed down, round and smooth, with fine sand-paper.

The meerschaum can be procured from a large-sized cigar-holder. One of the best tests of the purity of the article is its floating on water for a time, while plaster of Paris will immediately sink.

Lead leaves the usual lead-mark on the tip, as well as a slight indentation beneath the mark.

Iron, in either a recent or an old wound, leaves on the tip a blue trace; but, if the fragment of this metal is covered with an albuminous coating, no coloration will be shown.

Denuded bone, or any hard foreign body in the wound, when the tip is made to impinge against it, will leave a *scratch*. This quality is also useful in the examination of diseased joints where cartilages are ulcerated and bone exposed in the cavity of the joint.

If clothing be in the wound, and the heel of the tip (at F) be revolved against it, fibres of the material may be retained at this rough part of the

probe, and a strong glass or the microscope will complete the diagnosis.

In a case treated in 1865, after passing this probe beneath the scapula, it came out colored a deep black. On removing a Minié ball from beneath that bone, it was found invested with a portion of soldier's blue cloth.

Late in 1864 an officer informed me that by the aid of this probe, after the failure of other means of diagnosis, a fragment of shell was detected near his elbow, and was removed by a Dr. Smith, of the United States army.

A solution of the red prussiate of potassa, 20 grs. to the ounce, will sufficiently saturate the tip by leaving the latter in the fluid three days.

Before inserting the tip in a wound, wipe off the brown coating on its surface. In using the probe, revolve the tip on its axis, or move it to and fro upon its side, or laterally upon the end, against the foreign body. On withdrawing it from the wound, do not wash the tip until it has been carefully inspected with the aid of a glass. Finally, wash it in clear water, and, when dry, rub out the traces with fine sand-paper and polish with unglazed paper. Before using, however, the probe should be inspected with a glass, to be sure that there are no fibres of clothing or traces upon it.

With careful usage, one of these tips will last several years, and any one can affix another when necessary.

One end of the probe is made in the usual form.

Though using this probe often since 1864, I have seen no ill results following its employment.

ZANESVILLE, OHIO, December 16, 1872.

NOTES OF HOSPITAL PRACTICE.

EPISCOPAL HOSPITAL.

SERVICE OF SAMUEL ASHHURST, M.D.

A CASE OF NECROSIS OF THE CRANIAL BONES IN CONNECTION WITH DISEASE OF THE MASTOID CELLS.

IN the year 1868, George Clark, aged 12, became deaf, and in 1870 a discharge was established from both ears, from which time the hearing was very generally improved by the operation of syringing the meatus. About the middle of June, 1872, after a voyage from Boston to Truro, N.S., and return, he was sick for a week with "diarrhœa, sick stomach, and pain in the bones." He was quite well during the rest of the summer, spending part of it in a cork-factory in Boston, and towards its close working in a saw-mill at Bath, Maine. On September 27, 1872, he left Bath as a seaman, and upon his arrival at Philadelphia, September 30, was taken sick with diarrhœa and vomiting, and for the first time a swelling was noticed at the back of the right ear.

On October 5, 1872, he was admitted into the Episcopal Hospital, Philadelphia. A water-dressing was applied, and he was ordered fifteen drops of the tincture of the chloride of iron three times a day.

October 6.—There is a discharge from the right ear, which appears to come from the side rather than from the bottom of the meatus.

October 7.—The patient is confined to bed, and presents the following symptoms. He is almost entirely deaf. There is much puffiness of the eyelids and face on the right side, and the upper lip is swelled. The posterior portion of the scalp on the right side is elevated, and there is deep fluctuation present; the discharge from the ear has stopped.

October 9.—Discharge from the ear is re-established; there is less œdema of the face; his general condition is good. An opening was made through the scalp, and a considerable amount of sanious pus evacuated.

October 10.—There is continued discharge from the incision, and from both ears.

October 12.—Upon introducing a probe into the opening made a few days since, the skull is found to be denuded of periosteum for a space three inches in diameter. The discharge continues; pulse 120; skin hot; tongue moderately furred; there are no cerebral symptoms. A grave prognosis was made. He was ordered one pint of milk punch through the day, good diet, and beef-tea without stint. Pulse 120. Temperature in axilla 104°.

October 13, 10 A.M.—Pulse 140; temperature 104°. He was ordered six grains of sulphate of quinia, and twenty-four ounces of punch in the twenty-four hours. P.M. pulse 120; temperature 95°. (This was taken by a reliable nurse.)

October 14, 8 A.M.—Pulse 128; temperature 98°. One P.M., pulse 76; temperature 96.4°. Six P.M., pulse 136; temperature 104°. The pulse is of good volume, but much increased in frequency upon slight exertion. Here and there are dusky congested spots in the skin, and there are sudamina scattered over the surface of the abdomen. The *tâche cérébrale* is readily produced, but there is no other symptom pointing directly to the brain, his intellect being clear. His bowels are regular; the spleen is somewhat enlarged. The condition of the scalp is not materially changed.

October 15, A.M.—Pulse 148; temperature 98°. P.M., pulse 120; temperature 99.5°.

October 16, A.M.—General condition seems somewhat better. The congested appearance of the skin before referred to is now noticed to be confined to the left half of the body and the right leg. Owing to his deafness, it is not easy to examine the state of his intelligence, but it seems clear, and there are no cerebral symptoms. Pulse 84; temperature 100.5°.

October 18.—General condition improved; discharge small in amount; appetite good; appears to be doing well. (The temperature was not taken, owing to breakage of the thermometer.)

October 20.—Complains of chilliness. The congested appearance of the skin is again evident, and is confined, as before, to the left half of the body and the right leg. Has vomited once this morning.

October 21.—Congestion of skin continues; vomited again after breakfast. Pulse 120; temperature 104.5°.

October 22.—Limited congestions remain. A.M., pulse 120; temperature 104.5°. P.M., pulse 136; temperature 104°.

October 23.—Pulse 140; temperature 104°.

October 24.—The discharge from the incision has gradually increased since the 18th instant, and is now copious. There is considerable bagging of the scalp, for which a compress was applied. Complains of pain down the neck and in the upper part of the back: there is marked tenderness upon pressure over these regions. Sleeps naturally at times during the day; morphia is given at night.

October 25.—To-day there is evident pain in the neck upon rotation of the head. The local congestions continue; there are no new head symptoms, if indeed those already referred to are such. A counter-opening was made in the most dependent portion of the abscess, through which a free discharge of pus took place.

October 27, A.M.—Pulse 136; temperature 102°. P.M., pulse 120; temperature 98°.

October 28.—There is a free discharge from the lower opening in the scalp, and movement of the head causes less pain. A.M., pulse 140; temperature 102°. P.M., pulse 128; temperature 100°.

October 29.—Profuse discharge from the counter-opening. Pulse 120; temperature 105°.

October 31.—Has had a chill this morning. The peculiar congestion so often referred to is especially well marked. Discharge very abundant. Pulse 156; temperature 106°. Quinine increased to fifteen grains daily.

November 2.—Has had several convulsions, and at the time of my morning visit he lay moaning, in an unconscious condition. The right pupil was widely dilated, but the left was normal in size; both were insensitive. He has occasionally slight convulsions. It was decided to trephine with a small crown through the necrosed bone, in the hope of allowing the escape of any confined pus. The operation was followed by a cessation of convulsions, and normal contraction of the dilated pupil, although the escape of pus from beneath the bone was not very evident, as the parts were already so thoroughly bathed in the discharges. He gradually sank, and died quietly on the evening of November 3.

The post-mortem examination was made the next day. The membranes of the brain were very moderately injected on their posterior half. The occipital, temporal, and parietal bones were found to be extensively necrosed. The disease was limited externally to the inferior angle of the right parietal bone, and to the temporal bone. Internally it had invaded the occipital bone in the region of the right lateral sinus, considerable erosion and excavation having taken place there, which extended forward to the under surface of the petrous portion of the temporal bone, and in this locality two perforations, about one-fourth of an inch in diameter, had penetrated to the exterior of the skull; patches of superficial erosion were noticed upon the parietal and temporal bones, stained and slightly roughened. Externally the inferior angle of the parietal bone had undergone exfoliation, as was also the case with the squamous portion of the temporal. The mastoid process was extensively eroded, especially at its upper part, where the perforations from within were situated.

The case presents some points of interest, among which may be instanced the great variations in the temperature, and the occurrence of well-marked and persistent circumscribed congestion of the skin of the left trunk and right lower limb. I am able to furnish no satisfactory explanation for either of these phenomena, but think it well to place them upon record as clinical facts which may prove of value on comparison with other cases.

The question of interference by operation was anxiously debated, but it was thought best to await the efforts of nature so long as no distinct symptoms of compression appeared. The operation was undertaken without any defined hope of a successful result. It was, however, followed by partial amelioration of the symptoms. The trephine was applied nearly over the lateral sinus, in the expectation that the dead bone would be found separated from the sinus by lymph, and the latter so plugged with coagula as to avert all danger of hemorrhage.

The specimen affords a good illustration of how easily a trephine may be applied to a diseased external table and yet miss an internal abscess. Had I known of the existence of the large perforations revealed in the specimen, no operation would have been undertaken, as mechanical compression could hardly have existed. It is certainly remarkable that with such extensive disease of the bones there should have been so little meningitis.

THE INNERVATION OF THE LACHRYMAL GLANDS (*Lancet*, April 5).—In his experiments on this subject, Dr. Demtschenko (*Pflüger's Archiv*, Sept. 1872) has operated on animals narcotized by means of morphia. The subjects were dogs, cats, and rabbits. The electric stimulus was applied by means of Dubois-Reymond's apparatus. The quantity of fluid discharged by the lachrymal glands was estimated by the number of square centimetres of blotting-paper that were moistened. In the dog and cat the lachrymal nerve could be reached from the orbit; but in the rabbit the skull had to be opened. The chief results obtained by Demtschenko were that the temporo-malar nerve exercises no influence on the lachrymal gland. Excitation of the great sympathetic augments the secretion; it augments also the quantity of fluid secreted by the conjunctiva, even when the nerve is irritated after ablation of the gland. The augmented flow of tears which follows irritation of a large number of cranial nerves (as the frontal, infra-orbital, nasal, lingual, glosso-pharyngeal, and pneumogastric) is not interfered with by section of the sympathetic, but is stopped directly by section of the lachrymal. This reflex action is not wholly abolished during the sleep induced by chloroform. The author proceeds to compare the results of irritation of the sympathetic and of the fifth on the quantity and quality of the tears. The great violence requisite to expose the fifth throws a doubt upon the value of these experiments. The tears, however, were clear and limpid when the fifth was irritated, but cloudy when the sympathetic was excited. On the whole, he thinks he may conclude from these and other experiments that the great sympathetic presides over the normal humectation of the globe of the eye; and this is supported by pathological facts, since the eyes of patients suffering from paralysis of the fifth retain their proper moisture, though the power of shedding tears is abolished. Disturbances of the circulation caused variations in the lachrymal secretion. After ligation of the carotid artery, irritation of the lachrymal nerve caused a less abundant flow of tears than on the sound side. Ligation of the veins increased the flow of tears. All troubles of the respiration caused increased flow.

A RAILWAY CASE (*Lancet*, April 5).—A difficult railway case, developing a difference of opinion among medical men, was tried at the Carnarvon Assizes. On the one side, it was alleged that the plaintiff, a widow with five children, making 30*s*. a week or more before the accident, was paralyzed on the right side, and would never recover from it; on the part of the company, "equally eminent men" maintained that the paralysis was hysterical, and would disappear as soon as the anxiety connected with the trial was over. There had been no hysteria previous to the accident. The jury was puzzled by the discrepancy of medical opinion. After two attempts to agree, the parties concerned agreed to a verdict for the plaintiff for £600. The public may easily overrate the unreasonableness of a difference of opinion in such cases. Strictly speaking, no absolute opinion of the permanence of such injuries can be arrived at. It follows that one side takes the extremely favorable view, and the other the extremely unfavorable. The difficulty is in the nature of the facts and in the essential obscurity of nervous states.

CURE OF NÆVI BY MONSEL'S SOLUTION APPLIED EXTERNALLY.—Dr. Jacob Geiger, of St. Joseph, Mo., records (in *The American Practitioner* for April) a case in which two nævi, one occupying the perineum and part of the scrotum, and the other seated on the abdomen, of a child six months old, were completely removed, in less than one month, by painting twice a day with a mixture of equal parts of glycerine and a strong solution of persulphate of iron.

PHILADELPHIA
MEDICAL TIMES.
A WEEKLY JOURNAL OF
MEDICAL AND SURGICAL SCIENCE.

The Philadelphia Medical Times is an independent journal, devoted to no ends or interests whatever but those common to all who cultivate the science of medicine. Its columns are open to all those who wish to express their views on any subject coming within its legitimate sphere.

We invite contributions, reports of cases, notes and queries, medical news, and whatever may tend to increase the value of our pages.

All communications must bear the name of the sender (whether the name is to be published or not), and should be addressed to Editor Philadelphia Medical Times, care of the Publishers.

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EDITORIAL.

MISTAKEN LIBERALITY.

IT is stated in the daily papers that "two of the Departments" of the Michigan University, at Ann Arbor, have been placed under the control of homœopathists. Exactly what this means we do not know, although well aware that for many years the adherents of homœopathy have been working hard to get a footing in that school, which is, we believe, the only State institution of the kind in the country. But we presume that chairs for the teaching of Hahnemann's doctrines have been established, the professors holding equal rank with members of the previously existing Faculty.

Now, it would seem at first sight a most just and reasonable thing that every faith should have a hearing, and that each student should be allowed to choose that mode of practice which most commended itself to his judgment. And yet, were this plan followed up, Thompsonianism, eclecticism, hydropathy, and every other *ism* and *pathy*, might demand a chance to present its claims. In thirty years homœopathy has failed to impress itself in any degree upon medical opinions or practice; in the world of science it and its adherents are alike unknown. The dogma upon which it is based is avowedly untenable in emergencies. Hence it is idle to claim for it a place as a "department" of medicine.

We trust that the regular Faculty of the Michigan University will have the spirit to refuse utterly this unequal yoking, and to resign in a body if the attempt is made to force it upon them. They would have the moral support of the entire profession in so doing, and, even if the school should be left in the hands of homœopathists, the evil would be far less than that of a seeming fraternization with quackery.

THE REMOVAL OF THE ALMSHOUSE.

AMONG other public changes, some of which are for the better and some for the worse, it is proposed to abandon the present site of the Almshouse, building another in some less central position. Upon what pretext so needless and so very expensive a job is urged on the authorities, we do not know. The "palace for paupers," as Miss Martineau called it, has cost very large sums of money, both for its original construction and for repairs and improvements. It is large enough to afford shelter to a great many able-bodied men and women who ought to be made to earn their living. It is not in the way of projected streets or other public benefits which are at the present time imperatively needed. The ground it occupies has not yet so risen in value that the mere sale of it would pay the cost of the new structure.

We cannot help feeling a strong suspicion that the whole affair has arisen, not out of any public want, but out of private greed. A plan like this seemed to some contractor to afford the best available opportunity for a fresh grab at the city's purse, and he set things in train to get it on foot and the controlling strings in his hands. We believe that for the present the scheme is in abeyance, but we do not think that it has been so completely "squelched" as it deserves to be. Many things cry aloud for betterment before this matter need be thought of.

A VERY UNDESIRABLE REPEAL.

A BILL now before the Governor of this State will, if it becomes a law, affect very injuriously the sanitary interests of the growing portions of Philadelphia. It is, in brief, to repeal part of an act passed in 1855, which forbade the erection of any new house or building on any street, court, or alley of less than twenty feet in width, unless such house were set back so as to increase the width of the street, court, or alley to at least twenty feet.

Another portion of the same act of 1855 provided that no new street should be laid out with a width of less than twenty-five feet, and that every new dwelling should have an open space at least

twelve feet square either in the rear or at the side of it.

To the medical profession, who know too well the evils attendant upon the crowding together of the dwellings of the poor, the benefit of such legal enactments, properly carried out, must be patent; and it is difficult to see on what grounds the abrogation of laws so manifestly wholesome could be proposed. We most earnestly hope that the Governor will withhold his sanction from a measure which, for the pecuniary interest of a few, would sacrifice the health of many.

LEADING ARTICLES.

WHO ARE EXPERTS?

AMONG the topics that, at different times, have engaged the attention both of jurists and physicians, there is probably none of more importance, and none that has occasioned greater difficulty in trials, than the subject of *expert evidence*. In both civil and criminal cases, where the gravest interests are at issue, the final result frequently depends most materially upon the character of the expert testimony. It becomes, then, a question of the utmost consequence to understand the proper meaning of this term, and what is its significance when applied to evidence given in a court of justice.

The term "expert witness" literally signifies a *skilled* witness—one who has an accurate knowledge of the matter under consideration. Such witnesses are "chosen on account of their special knowledge or skill in particular matters, to testify, or make a report embodying their opinions" (Elwell). The "expert" witness does not testify to *facts*, like the ordinary witness; but he gives his *opinion* based upon facts that have been testified to by others. It is his special function to carefully weigh all these facts, to sit in calm judgment upon them, and to deduce conclusions from them, which he delivers to the court and jury as his *opinions*.

If he is an honest man, and delivers his opinions according to his oath "to declare the whole truth," he need not be afraid of the danger of committing a mistake in delivering his testimony, for he is simply *giving his opinion*, and he cannot be mistaken *as to that*, however he might be mistaken as to supposed facts. We presume that there can be nothing within the sphere of human intelligence more certain than the individual *opinion* which a man forms (supposing he forms one at all) after a careful consideration of a catenation of facts. Observe, we do not say that this opinion is necessarily or absolutely correct in the abstract,—that is not the question; we merely affirm that he cannot be mistaken as to the fact of its being his opinion; and *that* is all he swears to. As to its *correctness*, the jury must decide.

No doubt, many conscientious men fall into error just on this very point, and they are reluctant to testify as to matters of opinion, under the mistaken idea that they might commit a fatal blunder in a capital case, and perhaps, through their "opinion," be the unhappy means of sending a fellow-being to the gallows. Unquestionably, the position of the expert witness on such a solemn occasion is a most trying and responsible one. Keenly alive to the dreadful issue that may be hanging on his evidence, he must nevertheless deliver his opinions with all truthfulness. In the language of Dr. Percival, "he should use his best endeavors that his mind be clear and collected, unawed by fear, and uninfluenced by favor or enmity."

For the *consequences* of his opinions, he should however understand that he is in no wise responsible. He dare not suppress aught of what he conscientiously believes to be *the truth*, no matter what may be the result to the accused.

How unspeakably important, then, it is that the individual who assumes the functions of the "expert" witness in a criminal trial, should so clearly understand the matter on which he is to testify, and be so familiar with its every detail, as to preclude all possibility of error on his part! Yet it is notorious that nearly every criminal trial in our country is hampered, if not disgraced, by what has been sneeringly called by the newspapers the "war of the experts." The public have come to look upon it as a matter of course that the professional "experts" summoned for the different sides shall necessarily wage a fierce and bitter warfare against each other; and, regarding all the so-called experts as being on a precise equality, they allow the testimony of the one to neutralize that of the other; and they are consequently inclined to reject the whole as entirely superfluous, if not positively worthless,—a result which we feel assured is not unfrequently reached by the jury as well as the public—to the great and manifest disparagement of justice.

Let us, by way of illustration, suppose the case to be one of poisoning—real or alleged. Now, in order to substantiate the charge of poison, it is not enough that the symptoms should have resembled those of the alleged poison, since all authorities agree that there are no symptoms exclusively characteristic of any poison (for, if so, there would be

no occasion to make a chemical analysis); neither is it sufficient that the post-mortem lesions should resemble those attributed to the alleged poison, since it is notorious that these lesions are exactly simulated by disease. A third factor—the chemical analysis—must enter into the consideration. If all these three factors harmonize (supposing the chemical examination to have been properly made), we think that the proof of poisoning may be considered as established. But we by no means wish to be understood as maintaining that this proof can never be made out without the chemical evidence. On the contrary, there are cases where, for various reasons, this last means of proof is impossible, but where the whole circumstances of the case—medical and moral—point so unequivocally to poison as to leave no reasonable doubt as to its administration. These, however, are exceptional cases, and they demand the most searching investigation before arriving at a final decision.

Again, we may suppose another case—a non-fatal one,—where no chemical analysis has been made of any of the suspected food or drink, nor of any of the excreta of the body. For some reason, however, a suspicion has been excited against the accused party. Circumstances, not yet explained, have combined to give a coloring to the suspicion, and an arrest and a trial follow. Now, it is well known that the most innocent persons may, through a combination of circumstances, be thrown into the position of, apparently, the most positive guilt. It is this fact that constitutes the danger of a too exclusive reliance upon mere circumstantial evidence. In the above case, suppose that the "expert" witnesses for the prosecution do not fully answer to the standard which we have adopted and explained in the opening of this article; they are, to be sure, highly respectable physicians—it may be, men of large experience as general practitioners, but confessedly they are not "toxicologists,"—they have not made the subject of *poisons* in all their relations a *special* study; and shall they, simply because they are called "doctors," presume to thrust themselves into the witness-box, and swear away the life or liberty of a fellow-being exclusively on what *they* take to be the infallible "symptoms" of the alleged poison, when the highest toxicological authorities declare to us that there are no such symptoms? Or should the witness happen to be a *chemical* "expert," if he content himself with a partial, unexhaustive examination of some collateral material alleged to be connected with the accused party, and if he proceed to draw positive conclusions as to the discovery of some poison, from such imperfect data, can we safely admit his testimony as strictly coming up to the proper standard of "expert" evidence?

Let us test this question by reference to a civil case: suppose it relates to the strength and resistance of steam-boilers, connected with an action for damages in a case of boiler-exposion, we would hardly look to an ordinary blacksmith—no matter how skilful a mechanic he might be, or how well acquainted with the general properties of iron—as the fittest person to enlighten the court and jury upon the questions at issue; we should rather select our "expert" from among practical boiler-makers, or practical engineers. In like manner, if the question pertains to the strength of building-materials, in a case of alleged want of skill in the construction of some large public edifice, which had given way and occasioned the loss of human life, we should be far more likely to appeal to the skilful architect or the practical builder, for an "expert" opinion, than to a common carpenter or bricklayer, although the latter may be well acquainted with the ordinary properties of wood, brick, and stone. On what higher ground, then, we ask, should the mere general practitioner of medicine presume to offer himself as an "expert" in poison cases, and to contradict the testimony of those who may have devoted a life-long labor and research to this very study? A striking illustration in point is afforded in the case of the illustrious John Hunter, who, in the year 1781, was called upon as an expert to testify in the celebrated case of Sir Theodosius Boughton, who was poisoned with laurel-water by his brother-in-law, Donellan. Mr. Hunter was called for the defence, but his ignorance on the general subject of poisons caused him completely to break down on the cross-examination, leading to a mortifying failure on his part, and rather strengthening the case for the prosecution.

If only the same failure that happened to Hunter could be made to attend the presumptuous attempts of all pseudo-experts, it would be a happy circumstance for the cause of justice and humanity; but, unfortunately, this is not the case. Under our present faulty jurisprudence which permits any "doctor" to assume the character and functions of the expert, it constantly happens that a conflict of testimony occurs between the so-called skilled witnesses of the opposite sides, not because a difference of professional opinion is usually likely to exist between *genuine* experts, but because witnesses of unequal capacity and of unequal knowledge are opposed to one another,—the true against the false, the real against the counterfeit. But all this time the ignorant public and the no less ignorant jury

are made to believe that "one expert is just as good as another,"—as we happen to know a certain learned judge said in his charge to the jury,—although the one may be simply a village doctor, or perchance a city practitioner, but both equally unskilled in the mysteries of toxicology, whilst the other may be a Christison, an Orfila, a Taylor, or a Tardieu! Alas, for any hope of a righteous verdict from such a befogged jury! And alas, with such doctrine taught from high places, for the hope of making the public appreciate the true merits of the case!

This subject assumes a far more serious and important aspect when we add to what has just been said, the not uncommon fact that the pseudo-expert for the prosecution may possibly be prejudiced against the accused party, or against his counsel; or, it may be, he is hostile to the experts for the opposite side. Such a feeling, whether consciously or not, must of necessity warp and bias his judgment, and produce a distorted view of the facts of the case. This will undoubtedly lead him to give his "expert" opinion *against* the accused; and this ill-founded *opinion* will, in its turn, exert its baleful influence over the court and jury.

Now, such a state of things is simply monstrous, and it is fraught with real danger to the community. No one knows when he or she may become the victim of some combination of circumstances that may, for a while at least, cast its blighting shadow over their path, aspersing their character, or even threatening them with death! Heaven help the unfortunate who may get entangled in such coils, and be exposed to a public trial against such fearful odds! What could he expect from a jury, instructed as above mentioned from the bench, and bewildered and deceived as to the relative value of the "expert" testimony, by a crafty and unscrupulous counsel?

Is there any remedy for this really dangerous condition of affairs? None that we can see, until some change takes place in our faulty jurisprudence in the manner of selecting "expert" witnesses. So long as the courts assume the ground that "one expert is as good as another," and at the same time refuse the real expert the privilege of sustaining his opinions by reference to standard authorities in his own department,—the only possible method that we know, by which he can fortify his positions before the jury, and exhibit to them the superiority of *his* expert opinions,—so long as this is the case, we must abandon all expectation of fairness in jury-trials, and submit to the detraction of the real experts by some vulgar and abusive counsel, who, himself fully conscious of the superiority and power of the genuine expert on the opposite side, will endeavor to break down the dreaded influence of his evidence before the jury, by a fierce and malignant personal attack upon his professional and private character.

Several plans have, at different times, been proposed for remedying this abuse. The only one that occurs to us (and this seems scarcely feasible under our present system of selecting the juries) is to try all such cases before *educated* juries, by which we mean men who have a clear comprehension of the scientific points at issue, and who are capable of appreciating the difference between the testimony of a real and of a pseudo-expert.

PROCEEDINGS OF SOCIETIES.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

AT a conversational meeting held March 26, 1873, at 8 o'clock P.M.,

Dr. H. H. SMITH called the attention of the members to the treatment of hydrocele as he had practised it with very satisfactory results for several years. After alluding to the repeated failures of the injection, seton, etc., as usually practised, and the apprehension felt by many surgeons of hemorrhage in "excision of the sac," Dr. Smith stated that he had obtained cures in from ten to fourteen days, the patients sitting up on the third or fourth day, and had had no trouble from hemorrhage, by operating as follows. Etherize the patient, make the scrotum tense, incise the skin, dartos, and connective tissue carefully for from two to five inches in the long diameter of the tumor, until the tunica vaginalis is fully exposed, the blood-vessels being outside of the sac, or in the scrotal tissues. Having freed the testicle nearly from the scrotum, puncture the hydrocele with the bistoury, empty the sac, and then trim off with the scissors the anterior half of the tunica vaginalis testis, introduce a mesh into the lower end of the wound, and close the rest of it with the interrupted metallic suture. The cure is prompt and certain.

Dr. W. L. KNIGHT said he could sustain Dr. Smith in the remarks which he had just made, as he had recently operated in a case for him. The patient sat up on the fourth day; he walked about out-of-doors in two weeks, and within four weeks was able to attend to his usual active out-door duties. The operation was accompanied with but little pain or annoyance.

Dr. J. M. BARTON had treated a number of cases in the clinic of Jefferson Medical College, in which the seton had been used, and the patients were generally discharged in as short a time as that mentioned by Dr. Smith. In one case in private practice the patient attended to his ordinary business on the fifth day, the seton having been retained for three days.

Dr. A. D. HALL referred to a case of asthenopia in the person of a strongly-built, muscular young man, a student of theology. His complaint was that he could not see the types of his text-books distinctly. Only by bringing the page extremely near the eye could he see at all, and then the effort to do so caused great pain in the eyes and brows, which continued for an hour after.

There was slight injection of the conjunctivæ, and on

the left temple was an ancient scar of Heurteloup's leech, which had been applied by a Baltimore oculist during a week's stay in his private institution. His vision was not tested at that time.

Examination by the ophthalmoscope showed no changes in the fundus oculi; but there were evidences of both astigmatism and hyperopia. At twenty feet he could only make out No. 200 of Green's letters. This is a letter $3\frac{7}{16}$ of an inch broad, by $3\frac{5}{16}$ inches high. These measurements give a better idea of the low visual acuity. Both eyes were alike. He saw horizontal lines better than vertical ones. The addition of a convex glass of fourteen inches' focus reversed this state of affairs,—vertical lines came out distinctly, while the horizontal ones became dim. (This was shown by drawings upon the blackboard, by which the presence and amount of astigmatism were got at rather more quickly than by the ordinary methods in use. It was also so simple that it did not deter those wishing to undertake its investigation by a formidable array of detail.)

He was now given a convex cylindrical glass of fourteen inches' focus, with its axis vertical, and his vision rose to $\frac{20}{30}$. But he exerted his accommodation very powerfully, and to eliminate this element of error atropine solution of full strength was instilled. It was then found that the vision rose to $\frac{20}{30}$ for both eyes, with a convex cylinder of nine inches' focus, axis as above. After the effect of the atropia had passed off, it was found that this glass was too strong for steady use, as the habit of powerful accommodation was too old and strong to be so rudely broken in upon. But with a convex cylindrical glass of twelve inches' focus, its axis vertical, his vision was $\frac{20}{30}$, and with these glasses he could read No. $1\frac{1}{2}$ of Snellen's test-types (a little larger than printers' "diamond") at eleven inches, and as near as five inches, thus making his vision almost normal for distance, and quite so for near work. That astigmatism is quite common, those who are on the lookout for it will certainly agree. In 1862 Professor Donders, of Utrecht, found it in one of every thirty eyes that he examined. Although he had not the material immediately at hand to verify the assertion, still he was inclined to think that the average has risen in the course of the thorough ventilation the subject has had in the last decade.

In the above case, without the recognition of the fact that the weakness and irritation of the eyes were merely symptoms of an effect resulting from the tension of the ciliary and internal recti muscles in their effort to compensate for the irregular refraction of the cornea, we might have gone on prescribing until the "crack of doom" for an affection which could be cured then and there by the proper adaptation of glasses.

As the subject of sympathetic ophthalmia was one which always presented interest, and too often a melancholy one to both surgeon and patient, he would mention such a case which lately engaged his attention. It was one in which there could not be said to be any real sympathetic inflammation of the sound or uninjured eye. The condition of the eye was rather that of slight irritation; and yet, in spite of enucleation at once, in anticipation of what might come rather than from actual fear of what was present, this prompt removal of a possible source of trouble utterly failed to arrest a violent destructive process in the other eye.

The patient was a fine, bright young fellow of seventeen, engaged in a planing-mill at Kaighn's Point, N. J. Two days before Dr. H. saw him, he was struck by a flying piece of wood, $13\frac{1}{2}$ inches long, $\frac{3}{4}$ inch wide, and $\frac{1}{8}$ inch thick. This produced a perforating wound $\frac{1}{4}$ of an inch in length at the middle of the inner border of the left cornea, about 2‴ back of the sclerotic junction. There was moderate injection of the bulb. The cornea was dulled by the presence of blood and opaque lens substance as viewed by oblique illumination.

Removal of the (in his view) hopelessly injured globe as a precautionary measure was not consented to by the patient or his friends.

Twelve days after this the eye seemed to be free from any active inflammation. The blood which had obscured the view of the anterior chamber having been absorbed, there was seen to be a partial dialysis or tearing away of the iris (for its upper third) from the ciliary body. The lens was opaque, and its inner edge dislocated forward. A fortnight later he could count fingers, and with a little difficulty could distinguish the flame of a candle, with the injured eye. The amblyopia appeared to be due to the opacity of the lens. The wound had not healed over. There was some little ciliary injection of the nasal border, but the eye appeared to be steadily quieting down, and there was no sympathetic trouble of the other eye.

Three days after this he thought that he had caught cold in the injured eye. The bulb became deeply injected, but there was no involvement of the other as yet. In fact, it registered an accommodation of one-fourth. A week from this date (five and a half weeks after the reception of the injury) he complained of tenderness of the sound eye when he looked at anything for any length of time, and that strong light, although not painful, was disagreeable to him. Careful ophthalmoscopic examination revealed nothing abnormal in the fundus; his vision was normal $\frac{20}{30}$, and his accommodation was one-fourth, as before.

Enucleation of the injured bulb was again urged, and was now consented to. It was done with every prospect of success, as there was only the slightest flushing of the sound eye, and the accommodation was perfect. A week after, although the pupil of the eye was fully and equally dilated, the iris was discolored, and there was much circumcorneal injection. Iridocyclitis was set up; and as to subjective symptoms, he complained that everything appeared to him to be shrouded in mist.

The vision four days after this had sunk to $\frac{3}{100}$. From this time his vision passed through several degrees of acuity, but never improved beyond $\frac{1}{60}$. At the present date, five months after the enucleation, the eye still presents an irritable appearance; there is a slight ciliary zone; the pupil is fixed at half dilatation, of a slightly oval contour, the long axis vertical. The iris is discolored of a dirty, dull green color, while loops of new proliferations are seen fringing the circle of the uvea; new formations have also sprung from the anterior capsule of the lens, adding still more to the dulness of the parts. Now, these are certainly sad details to enumerate; and yet everything was done "in the nick of time" to save the uninjured eye (at least during the secondary period).

The great error was in the patient's declining the operation when first seen. Had he accepted it then, he would now have one good eye, instead of being blind. Granting that the vision of the injured bulb rose to quantitative perception, it was then at its maximum, and, from the nature of the injury and its severity, with its inevitable choroiditis and resulting effusions, the chronic involvement of the ciliary body in the tedious exudations and proliferations certain to drag their slow length along, it was impossible for the eye ever to be of a particle of use, but it was highly possible for it to be a most dangerous possession. And so it proved, in spite of the most anxious watching on the part of the surgeon, and the removal of the eye to all appearance as a measure anticipatory of coming evil.

Dr. H. H. SMITH, in connection with the remarks of Dr. Hall, wished to call the attention of the Society to the very marked and happy results of the application of electricity in a case of blindness. A child 9 years

old suffered, eighteen months since, from bad scarlatina, followed by otorrhœa. About two months since he was accidentally found to be perfectly blind of the left eye, being unable to distinguish any light. An examination by Dr. Franklin D. Castle, with the ophthalmoscope, revealed anæmia and atrophy of the retina. The boy at this time was not aware of any light or impression made by the ophthalmoscope. The case being placed in Dr. Castle's charge, it was agreed to try the effects of electricity, applied through the eyeball by connecting the negative pole of the battery with an eye-cup of water in contact with the ball, placing the positive pole on the nape of the neck; and to combine with this the chalybeates, etc. In a day or two afterwards the "continued current" was thus applied for fifteen minutes, at the end of which time the patient recognized various objects, and now can read ½-inch type for half an hour daily, the right eye being closely bandaged. The case continued to improve, and there was reason to anticipate a permanent cure. Dr. Smith was not aware of any other marked case like this, and therefore presented it to the Society.

In reference to the case narrated by Professor Smith, Dr. HALL asked the exact nature of the lesion. If it were a case of anæmia or anæsthetic condition of the optic nerve, he could well understand that the electric stimulus might furnish "a fillip" to the halting function. He had a case under treatment in which the nerve was blanched; the field of vision contracted in its periphery; the amount of vision being $\frac{1}{200}$ for the right eye, and for the left $\frac{1}{40}$.

The man was 55 years of age, an engineer; had noticed dimness of vision of the left eye for four months. It had occurred "all at once," preceded by "flashes of light" for a day or two previous. He had no headache, nor any pain in the eye. The right eye was good at that time; two months later there was sudden diminution of vision.

He considered himself temperate. The steam and glare of his occupation caused the disease, in his own opinion.

The only appearance on ophthalmoscopic examination was a slight blanching of the papillæ.

The treatment at first pursued was moderate local depletion by the Heurteloup leech, repeated at stated intervals, and an alterative course of corrosive sublimate and potassium, followed by a tonic course of iron, quinine, and strychnia. Suffice it to say that the improvement, if it took place at all, was hard to perceive. He did not see the patient for several months, during an absence in Europe; but on his return it was found that vision of the left eye was quantitative, whilst that of the right eye was $\frac{1}{10}$. The patient was almost discouraged, and his surgeon quite so. He had "rung all the changes" of treatment, and it was feared that the case must be pronounced incurable. Just then Dr. H. happened upon Professor Nägel of Tübingen's brochure on "Strychnia as a Remedial Agent in Amaurosis," and shortly after the papers of Professor Chisolm, of Baltimore, upon the subject of subcutaneous injections of strychnia. He therefore resolved, as a "*dernier ressort*," to put this method to the test. He began, as recommended by Chisolm, with $\frac{1}{40}$ of a grain of sulphate of strychnia, on the 19th of November, 1872. This was continued each morning, increasing the strength by a few minims each day. On the 7th of December, after using ½ of a grain of strychnia for several days, the patient said that "he saw the numbers of houses across the street quite plainly;" he also felt the effect of the previous morning's injection quite severely,—such as rigidity about the jaws and muscles of the neck; and here Dr. H.'s experience seemed to corroborate that of the other observers,—that but slight effect was produced until one mounted up among the ¼-grain doses.

22d of January, 1873, the patient was taking ½ of a grain by injection in the morning, and a pill of $\frac{1}{30}$ of a grain by the mouth in the evening.

He then read 3½ of Snellen's types with a +12 glass slowly.

4th of February, 1873.—Has been taking ½-grain injections in the morning, with the usual night dose ($\frac{1}{30}$ gr.) for a day or two. He now reads No. 3 of Snellen with +12 (= to ordinary newspaper type).

The ½-grain injections were continued daily, and on the 3d of March he stated that he saw the *North American* newspaper better than he had done for three months previous, and that his distant sight was better also, although the snow on the ground was unfavorable for clear vision. A member of his family also said that his vision was "fifty per cent. better."

REVIEWS AND BOOK NOTICES.

THE MEDICAL AND SURGICAL HISTORY OF THE WAR OF THE REBELLION (1861–1865). Prepared, in Accordance with Acts of Congress, under the Direction of Surgeon-General JOSEPH K. BARNES, United States Army. 2 vols. 4to, pp. 1134 and 819. Washington, Government Printing-Office, 1870.

We think that a just pride will be felt by the American medical profession, and indeed by our countrymen generally, in these admirable volumes. They afford a singular proof of the intellectual activity which could, amid all the horrors of civil war, coming suddenly upon a nation "quiet and secure," as the Scripture has it, not only grapple with the great issues of the contest, raise men, money, and supplies, but develop a medical organization and a hospital system which is at the present time a model for such services throughout the civilized world; and, beyond all this, could utilize the fearful experiences of the struggle so as to crown its results with a contribution to science such as that we have now to notice.

Nor does it seem as if any one acquainted with the early history of the war, and especially of the Army Medical Department, could fail to be reminded, by these volumes, of the valuable services rendered during his brief career as Surgeon-General by Dr. William A. Hammond. His harsh dismissal, on grounds partly technical and partly personal, but in no way touching his integrity, took the work he had so ably begun out of his hands. It had, however, acquired a definiteness and a momentum which were fully recognized by his successor, the present chief of the army medical service, who has shown not only zeal and activity, but enlightened judgment, in his administration.

The first volume opens with a prefatory note, by Surgeon-General Barnes, briefly sketching the history and objects of the work. Following this is an introduction, by Surgeon J. J. Woodward, to whom the medical portion of the task was assigned. We learn from this that the basis of the statistical tables is slightly modified from that adopted by Dr. Farr, the English statician, and is as follows:

"Class I. Zymotic Diseases.—Order 1, Miasmatic. Order 2, Enthetic. Order 3, Dietic.

"Class II. Constitutional Diseases.—Order 1, Diathetic. Order 2, Tubercular.

"Class III. Parasitic Diseases.

"Class IV. Local Diseases.—Order 1, Of the Nervous System. Order 2, Of the Eye. Order 3, Of the Ear. Order 4, Of the Organs of Circulation. Order 5, Of the Respiratory Organs. Order 6, Of the Digestive Organs. Order 7, Of the Urinary and Genital Organs. Order 8,

Of the Bones and Joints. Order 9, Of the Integumentary System.

"Class V. Wounds, Accidents, and Injuries.—Order 1, Wounds, Accidents, and Injuries. Order 2, Homicide. Order 3, Suicide. Order 4, Execution of Sentence."

The tables arranged on this plan are based on the Monthly Sick Reports made to the Department, and are arranged in years corresponding with the fiscal years, which end on the 30th of June. The statistics of the white troops embrace officers as well as enlisted men; those of the colored troops include the enlisted men only, the officers being all white. They are derived immediately from a comparison of data obtained from three sources,—viz., the Adjutant-General's office, the Quartermaster-General's office, and the Surgeon-General's office; and the amount of labor involved is scarcely conceivable. *Seven hundred and twenty-six* pages are occupied by these tables, which do not include, of course, the killed in battle.

Surgeon Woodward's explanatory introduction—which, by the way, contains a brief but interesting sketch of the development of the system of post, regimental, division, and general hospitals—should be carefully read and weighed by all who would consult these most valuable statistics.

The appendix to this part, occupying three hundred and sixty-five pages, consists of Reports of Medical Directors, and other documents, constituting a very important contribution to the history of the war.

In the second, or surgical volume, prepared by Surgeon George A. Otis, we have first an explanatory introduction, containing much matter of interest. We note a sad but honorable record of medical officers killed and wounded in the discharge of their duty. Nineteen lost their lives in battle; thirteen were killed by partisan troops, guerillas, or by rioters; eight died in consequence of wounds, and nine of accidents; while seventy-three were wounded in action.

A chronological summary of engagements and battles, with the number of Union troops engaged, and of killed, wounded, and missing on both sides, covering one hundred and six pages, leads to the scientific portion of this volume, which is devoted to the discussion of wounds and injuries of the head, chest, and spine. Wounds of the abdomen and pelvis will be treated of in the next volume.

We greatly regret that our limited space wholly precludes any attempt at an analysis of the matter contained in these pages, which are amply and admirably illustrated. Surgeons will find in them a mine of information worthy of the closest study and reflection.

GLEANINGS FROM OUR EXCHANGES.

INSANITY.—We take the following from a lecture by Dr. C. B. Radcliffe, in the *British Medical Journal* for April 5:

"That state of mind to which is given the name of melancholy is so common among lunatics, that melancholy and insanity have been used as mutually convertible terms. The anatomy of melancholy, to go no further, is a treatise on insanity. In some cases, of course, this state of mind is not so obvious as in others, and it may be difficult to detect it if the patient be reticent. In the more aggravated cases there is no such difficulty, the patient often sitting hour after hour, or day after day, motionless, with clasped hands and woe-begone features, or else, driven past endurance by feelings of anguish and despair, continually moving about, moaning or wailing, wringing his hands, praying for death, or even seeking it, too often successfully, at his own hands. As a rule, this state of mind would seem to be the very reverse of that which shows itself in inordinate self-esteem, the patient often believing himself to be thoroughly bad and wicked in every way, with a dreadful doom in store for him both here and hereafter. And the more marked delusions in association with melancholy are in conformity with this idea. I know, for example, a miserable man, long a victim to deep melancholy without delusion, whose delusion now is that he is a murderer, condemned and left for immediate execution, who will not look out of window lest he should see the gallows, and who, whenever the handle of his door turns, expects the executioner. And the cases are legion of those who think that they have committed the unpardonable sin, for which their inevitable doom is everlasting destruction. It would also seem that this terrible self-depreciation may lead to another kind of delusion, the very opposite of that to which inordinate self-esteem would seem to lead in some cases,—namely, to a loss of personal identity, in which the idea of self is lost, as it is lost in lycanthropy. At all events, I know of one case in which there were true fits of lycanthropy, or rather cynanthropy, where the settled melancholy, which was the predominant state between the fits, had its origin in what may be spoken of as the *worm-doctrine* of human nature, and in the miserable forebodings as to the future to which it led. But, be the relation of this, or any form of delusion, to melancholy what it may, the facts remain not only that melancholy is a morbid feature in insanity, but that melancholy, more or less deep, without delusion, must have assigned to it a very prominent position among the symptoms of incipient insanity.

"There are, no doubt, many variations and many combinations in the symptoms of incipient insanity. Sometimes one or two of the symptoms only are present, to the exclusion of the rest. If all are present,—an almost inconceivable case,—then there would be a state of intense self-conceit without actual delusion; a state of moroseness and misanthropy without actual delusion; a state marked by great mistrust and suspicion, without actual delusion; a state of uncontrollable impulsiveness without actual delusion; a state of melancholy without actual delusion; a warped state of the intellect without actual delusion, irregularity of fancy showing itself in illusions and hallucinations; and, lastly, a tendency to delirious excitement. In actual insanity one or more of these several morbid mental conditions is always present, the change which has happened consisting only in the addition of some actual delusion, which delusion very often, to say the least, may be looked upon as the natural result of the exaggeration of the morbid mental condition most closely associated with it."

MYOTOMY BEFORE CATARACT OPERATIONS.—Mr. Edwin Chesshire, Senior Surgeon to the Birmingham and Midland Eye Hospital, advocates, in the *British Medical Journal* for April 5, section of the orbicular muscle and integument of the outer canthus as a preliminary to the extraction of cataract.

The advantages he claims for this are "more extensive exposure of the globe, which enables the operator to manipulate his instruments, and to make his section through the cornea with greater ease. And the spasmodic contraction of the orbicular muscle being overcome, the operator is left to complete his operation at his leisure; while all risk of sudden protrusion of the lens, followed as it sometimes is by prolapse of the iris and escape of the vitreous, is almost entirely avoided; and the contraction of the lids on the globe, which is sometimes a troublesome symptom in the after-treatment of cataract-extraction, is prevented.

"With division of the orbicular muscle, the wire speculum, which greatly facilitates each step of the operation, may be used without injury or annoyance to the patient. No sutures are required, as the divided surfaces readily unite, and scarcely leave a trace behind them. All that is necessary to be done is to keep the eyelids nicely in apposition for a few days after the operation by means of strips of court-plaster. All bandages and other coverings after extraction are to my mind objectionable, as it is important to have the fullest opportunity of examining the appearance of the lids without disturbing the patient by the removal of external appliances. Moreover, the support afforded by the lids to the corneal flap, when nicely kept in position by strips of court-plaster, is very agreeable to the patient. Spasm may be brought on, and the partially-healed corneal flap may be opened, by the removal of bandages, wool, etc., which may have become adherent to the lids.

"The operation is done as follows. A wire speculum is placed between the lids, to enable the operator to make his section through the muscle and integument at the external canthus with precision and ease. I have made no allusion to the mode of extracting, as the plan I propose is equally applicable to all extractions. I never use chloroform or ether in extraction, as the sickness which frequently follows their administration far outweighs any advantage that may otherwise result from the use of anæsthetics during the operation; and with the orbicular section, the globe being more under control, they are still less required. Where great neatness is desired, the section may be made subcutaneously."

Acute Bronchocele (*British Medical Journal;* from the *Archiv der Heilkunde*, vol. xiv. No. 6).—Dr. Ludwig (of Pontresina) describes the case of a gentleman who, after suffering from violent paroxysms of cough for some days, was suddenly seized with a swelling on the front of the neck, which impeded respiration. There was found to be an elastic swelling extending downwards from four centimetres below the middle of the thyroid cartilage nearly to the sternum, and to the sterno-mastoid muscle on each side. In the course of a few hours, it increased to the size of a child's head; the dyspnœa became more intense, and deglutition was difficult. There was no pulsation in the tumor. Soon, however, it began to diminish; and the next day it had entirely disappeared. Ludwig regards the case as one of acute hyperæmia of the thyroid body, but cannot assign a cause.

On Temperature in Phthisis.—In an inaugural thesis published on the above subject by Dr. Bilhaut, the author puts down the following, among other conclusions. From the outset of the disease the temperature rises; towards the end of the disease there is often a marked decrease of temperature; diarrhœa and abundant hæmoptysis produce a fall of temperature; differences of temperature show the gravity of the disease; slow asphyxia and inanition induce a fall of temperature towards the approach of death; the tracings in cheesy pneumonia seem to be more regular as regards vesperal exacerbations and morning remissions than the tracings in tuberculosis; the complications of the disease modify the form of the tracings.

MISCELLANY.

Leprosy in the Sandwich Islands.—The Honolulu *Gazette* says, "Dr. Trousseau and Hon. S. G. Wilder, of the Board of Health, visited the Leper Hospital at Kalaupapa, on Molokai, on Wednesday and Thursday of last week. They found the settlement numbered over 600 persons, of whom about 120 were the natives who lived in the village prior to its selection as a hospital site, who, as owners of the land, prefer to remain on it. There are over 400 lepers, and about 100 relatives, who have gone there self-banished rather than be separated from their kin. The patients, gathered there from every island of the group, were as contented as could be expected. No complaint was made by any one, and, in answer to inquiries, all said they had an abundance of food and everything they wanted. Few realize the magnitude of this work. The plague is extending, and, with all the vigilance of the authorities to check it by isolating every new case, it is rapidly spreading, chiefly among the young, who inherit it from their parents. The very worst cases are boys and girls; and to establish and carry out the rule that every child tainted with the disease must be torn from its parents and banished for life among strangers and lepers, seems cruel. Yet this is now being done every month with natives."

At the recent meeting of the British General Medical Council on Education and Registration, the name of Dr. Matthew Bass Smith was ordered to be erased from the *Register*, for "infamous conduct in a professional respect," in seducing a female patient.

Another charge, that a surgeon had "stated or insinuated, or used language from which the inference might be drawn," that he had committed adultery with a married patient of his, was decided not to be sustained by the evidence.

"The case of James Mawhinney, supposed to be a registered person, convicted of theft at Stirling, was deferred for legal evidence of identity."

The name of Dr. Frederick Henry Morris, erased from the *Register*, "in consequence of his conviction on an alleged charge of indecent assault," in 1871, was ordered to be restored.

[If such cases exist in this country, as they very probably do, there is no central authority to take cognizance of them.—Ed.]

Inhumanity.—An inquest was lately held in London respecting the death of Elizabeth Jackson, aged 18, a domestic servant. Her mistress, learning that she was feverish, told her she had better go, as she did not want anybody in such a state there. The deceased then went to a Mrs. Foley, who, however, finding she was feverish, also turned her away. The deceased was provided with a bed by a Mrs. Henley, but was taken out and placed on the stones when it transpired that she had a fever. A police constable, finding her insensible on the stones, had her removed to the hospital, where she died from inflammation of the brain. The coroner said that he had never had a worse case of inhumanity before him. The women might have taken the deceased to the infirmary instead of turning her into the streets. The jury returned a verdict in accordance with the medical evidence.

Powerful Medicines.—A homœopathic practitioner writes to one of their periodicals that he has a score of

times known medicine prescribed by him to break the glasses in which it was mixed, and that other physicians of the same faith had found it a very common thing. He says, "I have had glass broken by belladonna 30th, mercurius solubilis 6th and 12th, pulsatilla 30th, and also by colocynth 2d, but never by any potency lower."

It certainly seems like heroic practice to put such articles (*if* the story be true) into the human stomach.

PROFESSOR TYNDALL, during his recent scientific lecturing tour in the United States, delivered in all thirty-five lectures, at which his receipts aggregated $23,100. After paying expenses, a fund of over $13,000 remained; and this, before leaving for Europe, he placed in the hands of a committee, who are authorized "to expend the interest in aid of students who devote themselves to original research." The committee are Professor Joseph Henry, of the Smithsonian Institute; Professor E. L. Youmans, of Yale College; and General Hector Tyndale, of Philadelphia.

THE Association of American Medical Editors will meet at St. Louis on Monday evening, May 5, at 8 o'clock.

The American Medical Association begins its session the next day. We have not, as yet, heard whether or not the attendance is likely to be large.

THE Chief of the Medical Division of the Pension Office is about to make a pretty thorough reorganization of his corps of examining surgeons throughout the country, since a number of them, it is alleged, are not so prompt and careful in their duties as it is desirable that they should be.

THE carcass of a horse was dissected in Edinburgh a few weeks since with the result of extracting from the stomach a large dust-ball as hard as stone, about twenty-three inches in circumference, and weighing eight pounds. The animal had been fed on mill-dust.

THE Indianapolis *Journal* complains that, in making post-mortem examinations, the doctors of that place use a wood-saw, a butter-knife, and an axe.

A FRENCH physician has discovered that the death-rate in Paris has increased in proportion as cravats have decreased in size.

BARON JUSTUS LIEBIG.—The death of this eminent authority in chemistry and physiology, at the age of 70, is announced.

THE directors of the Bank of England have voted £1000 in aid of the London Hospital Extension Fund.

MORTALITY OF PHILADELPHIA.—The interments reported at the Health Office for the week ending April 19, 1873, were 357; 175 adults, and 182 minors. 11 were of bodies brought from the country; making the mortality of the city 346. Among the assigned causes of death were:

Consumption of the Lungs	55
Other Diseases of the Respiratory Organs	63
Diseases of the Circulatory Apparatus	16
Diseases of the Brain and Nervous System	60
Diseases of the Digestive Apparatus	28
Zymotic Diseases (9 from Scarlet Fever)	30
Typhoid Fever	5
Casualties	11
Cancer	9
Tumors	2
Syphilis	3
Exposure	1
Debility (including "Inanition" and "Marasmus")	24
Still-born	23
Old Age	11

(The interments reported for the week ending April 20, 1872, were 361.)

THE meteorological record kept at the Pennsylvania Hospital was as follows:

	THERMOMETER. Max.	Min.	BAROMETER. (2 P.M.)
April 13	52.0°	43.0°	29.99 in.
" 14	60.0	49.0	29.96 in.
" 15	59.0	49.5	30.06 in.
" 16	56.0	46.0	30.26 in. (Rain.)
" 17	47.0	39.0	29.87 in. (Rain.)
" 18	58.0	43.0	29.80 in.
" 19	58.0	49.0	29.86 in. (Showers.)

OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY, FROM APRIL 15, 1873, TO APRIL 21, 1873, INCLUSIVE.

MCLAREN, A. N., SURGEON.—Granted leave of absence for sixty days, to take effect from May 1, 1873. S. O. 14, Military Division of the Atlantic, April 16, 1873.

By S. O. 82, War Department, A. G. O., April 18, 1873, the following changes are made:

The following officers are relieved from their present duties, and ordered to report in person to the Commanding Generals of the Departments to which they are respectively transferred, for assignment to duty:

SMITH, ANDREW K., SURGEON, from the Department of the South to that of the Missouri.

GRAY, CHARLES C., SURGEON, from the Department of the East to that of Texas.

FRYER, BLENCOWE E., SURGEON, from the Department of the Missouri to that of the East.

WEEDS, JAMES F., SURGEON, from the Department of the South to that of Dakota.

MIDDLETON, J. V. D., ASSISTANT-SURGEON, from the Department of the Gulf to that of Dakota.

WOODHULL, ALFRED A., ASSISTANT-SURGEON, relieved from duty in the Department of the Missouri, to proceed to Baltimore, Md., and report by letter thence to the Surgeon-General.

The following officers are relieved from duty in the Departments set opposite their respective names, will proceed to New York City, and report thence by letter to the Surgeon-General:

GREENLEAF, CHARLES R., ASSISTANT-SURGEON, Department of the Columbia; AZPELL, THOMAS F., ASSISTANT-SURGEON, Department of California; BREWER, JOHN W., ASSISTANT-SURGEON, Department of the Missouri; KOERPER, EGON A., ASSISTANT-SURGEON, and PATZKI, JULIUS H., ASSISTANT-SURGEON, Department of Texas.

WHITE, R. H., ASSISTANT-SURGEON.—Relieved from duty at Mobile, Alabama, and to comply with S. O. 74, c. s., A. G. O.

CORSON, J. K., ASSISTANT-SURGEON.—Assigned to duty at Mobile, Alabama.